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| APPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|---------------|----------------------|-------------------------|------------------|--|
| 10/790,724 | 03/03/2004 | Hyun Kyung Kim | 2336-246 | 2634 | |
| 75 | 90 02/25/2005 | EXAMINER | | | |
| LOWE HAUPTMAN GILMAN & BERNER, LLP 1700 Diagonal Road, Suite 310 Alexandria, VA 22314 | | | DICKEY, THOMAS L | | |
| | | | ART UNIT | PAPER NUMBER | |
| ŕ | | | 2826 | | |
| | | | DATE MAILED: 02/25/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Applicat | ion No. | Applicant(s) | | | | | |
|--|--|----------------------------|--|-----------------|---------------------|--|--|--|--|
| | | 10/790,7 | 724 | KIM, HYUN KYUNG | | | | | |
| Of | ffice Action Summary | Examine | or | Art Unit | | | | | |
| | | Thomas | L. Dickey | 2826 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | | |
| Status | | | | | | | | | |
| 1)⊠ Respo | onsive to communication(s) file | ed on <u>03 March</u> 2004 | <u>!</u> . | | | | | | |
| · <u> </u> | | 2b)⊠ This action is | | | | | | | |
| | ,— | | | | | | | | |
| Disposition of | Claims | | | | | | | | |
| 4a) Of 5) ☐ Claim 6) ☐ Claim 7) ☐ Claim | Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) 1-17 are subject to restriction and/or election requirement. | | | | | | | | |
| Application Pa | pers | | | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | |
| Priority under | 35 U.S.C. § 119 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| Attachment(s) | | | | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | | |
| 3) 🔲 Information D | ftsperson's Patent Drawing Review (F Disclosure Statement(s) (PTO-1449 or Mail Date | | Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | |) - 152) | | | | |

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 12-17, drawn to a method, classified in class 438, subclass 29.
 - II. Claims 1-8, drawn to a device, classified in class 257, subclass 98.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of the Group II product invention would not necessarily imply unpatentability of the Group I process invention, because the product of the Group II invention could be made by a materially different process from that of the Group I invention. For example, the product of claim 1 could be made by a process which includes neither a step of forming, nor a step of removing, a photoresist layer, a process materially different from the process of claim 12. For another example, the product of claim 6 could be made by a process which includes steps of forming first conductive semiconductor layer, an active layer, and a second conductive semiconductor layer by implanting dopant into a single undoped intrinsic layer, a process materially

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different from the process of claim 12. For another example, the product of claim 8 could be made by a process which includes a step of forming an insulation layer over a conductive substrate around a projection in said conductive substrate which leaves a hole in said insulation layer, but does not include a step of removing any portion of the insulation layer, a process materially different from the process of claim 17.

Claims 9,10, and 11 link(s) inventions II and I. This is because claims 9,10,11, and 17 define necessary methods of making the product of invention II, while at same time defining generic means for performing the process claims specifically spelled out by invention I. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 9,10, and 11. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

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2. Because inventions I and II are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 703-308-6601. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions

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on access to the Private PAIR system, have questions on access to the Private PAIR system; contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas L. Dickey Patent Examiner Art Unit 2826 02/05